ABSTRACT

The present invention relates to the use as a sensitive material in a thin layer for bolometric detection of infrared radiation, of a material having a spinel ferrite structure of chemical composition, ignoring doping agents if any are present, satisfying empirical formula I:

$$Fe_{3\text{-}(x+y)}M_xA_yO_{4+\delta}.$$

The invention also provides a bolometric device for detecting infrared radiation or for infrared imaging, and including at least one sensor provided with a sensitive element in the form of a thin layer as defined above.